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LISTING OF THE CLAIMS

- 1. (Currently Amended) A method for doing call classification 1 on a call to a destination endpoint, comprising the steps of: 2 receiving audio Information from the destination endpoint; 3 analyzing received audio information for words using automatic 4 5 speech recognition; and determining the call classification from the analyzed words 6 where the call classification specifies at least one of the endpoint is busy 7 or the call is being redirected. 8 2. (Original) The method of claim 1 wherein the analyzed 1 words are formed as phrases. 2 1
 - 3. (Original) The method of claim 1 wherein the step of analyzing comprises performing front-end feature extraction on the received audio information to produce a full feature vector.
- 4. (Original) The method of claim 3 wherein the step of
 analyzing further comprises computing log likelihood probability from the
 full feature vector.
- 5. (Original) The method of claim 4 wherein the step of analyzing further comprises updating a dynamic programming network used in the step of analyzing in response to the computed log likelihood probability.

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- 6. (Original) The method of claim 5 wherein the step of updating comprises the step of executing an Viterbi process.
- 7. (Original) The method of claim 5 further comprises the step of pruning the nodes in the dynamic programming network used in the step of analyzing.
- 8. (Original) The method of claim 7 further comprises the step of expanding a grammar network used in the step of analyzing.
- 9. (Original) The method of claim 8 further comprises the step of performing grammar backtracking in response to the expanded grammar network.
- 1 10. (Original) The method of claim 9 wherein the step of backtracking comprises the step of executing another Viterbi process.
- 1 11. (Original) The method of claim 1 wherein the step of determining comprises executing an inference engine in response to analyzed words.
- 1 12. (Original) The method of claim 11 further comprises the 2 step of analyzing the audio information to detect tones; and 3 the step of determining further responsive to the detection of 4 tones for determining the call classification.
- 1 13. (Original) The method of claim 12 further comprises the 2 step of analyzing the audio information to identify energy in the audio 3 Information; and

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4	the step of determining further responsive to the identification of
5	energy for determining the call classification.

- 1 14. (Original) The method of claim 13 further comprises the step of analyzing the audio information to identify zero crossings in the 2 audio information; and 3
- the step of determining further responsive to the identification of 4 zero crossings for determining the call classification. 5
- 15. (Canceled) 1
- 16. (Canceled) 1
- 17. (Canceled) 1
- 18. (Canceled) 1
- 19. (Canceled) 1
- 20. (Canceled). 1
- 1 21. (Currently Amended) An apparatus for classifying a call to 2 a called destination endpoint, comprising:
- a receiver for receiving audio information from the called 3 destination endpoint; 4
- automatic speech recognizer for determining words in the 5 received audio information: and 6
- an inference engine for classifying the call destination endpoint 7
- in response to the determined words where the classifying specifies at 8
- least one of the endpoint is busy or the call is being redirected. 9

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- 1 22. (Original) The apparatus of claim 21 wherein the
- 2 determined words are formed as phrases.
- 1 23. (Original) The apparatus of claim 21 further comprises an
- 2 analyzer for determining another classification from the received audio
- 3 information.
- 1 24. (Original) The apparatus of claim 23 wherein the analyzer
- 2 is one of a tone detector, energy detector, or a zero crossings detector.
- 1 25. (Original) The apparatus of claim 24 wherein the automatic
- 2 speech recognizer is executing a Hidden Markov Model.